

The University of Southern Mississippi

## The Aquila Digital Community

---

### Faculty Publications

---

10-2016

## Individual Differences and Rating Errors in First Impressions of Psychopathy

Christopher T.A. Gillen

Henriette Bergstrom

Adelle E. Forth

Follow this and additional works at: [https://aquila.usm.edu/fac\\_pubs](https://aquila.usm.edu/fac_pubs)

---

# Individual Differences and Rating Errors in First Impressions of Psychopathy

*Evolutionary Psychology*  
October-December 2016: 1–7  
© The Author(s) 2016  
Reprints and permissions:  
[sagepub.com/journalsPermissions.nav](http://sagepub.com/journalsPermissions.nav)  
DOI: 10.1177/1474704916674947  
[evp.sagepub.com](http://evp.sagepub.com)



Christopher T. A. Gillen<sup>1</sup>, Henriette Bergström<sup>2</sup>, and Adelle E. Forth<sup>3</sup>

## Abstract

The current study is the first to investigate whether individual differences in personality are related to improved first impression accuracy when appraising psychopathy in female offenders from thin-slices of information. The study also investigated the types of errors laypeople make when forming these judgments. Sixty-seven undergraduates assessed 22 offenders on their level of psychopathy, violence, likability, and attractiveness. Psychopathy rating accuracy improved as rater extroversion-sociability and agreeableness increased and when neuroticism and lifestyle and antisocial characteristics decreased. These results suggest that traits associated with nonverbal rating accuracy or social functioning may be important in threat detection. Raters also made errors consistent with error management theory, suggesting that laypeople overappraise danger when rating psychopathy.

## Keywords

thin-slices, personality differences, psychopathy, error management theory, first impressions

Date received: July 14, 2016; Accepted: September 20, 2016

Despite concerns regarding the accuracy of first impressions, research suggests that judgments based on 30- to 60-s segments of audio/visual information called thin-slices can be more accurate than longer term judgments. Previous research found that laypeople ratings are related to accurate identification of personality (Carney, Colvin, & Hall, 2007; Funder, 2012), deception (Costanzo & Archer, 1989), and violence (Stillman, Maner, & Baumeister, 2010). People may possess these skills because it is an evolutionary advantageous detection mechanism against those perceived as a threat. Bar, Neta, and Linz (2006) argue that being able to quickly and accurately identify personality traits in people we first meet allows us to detect dangerous cues early in an interaction and flee before harm can be inflicted.

## Psychopathy and First Impressions

It is less clear, however, if this is true of all high-risk individuals, such as psychopaths. Psychopathy is associated with a constellation of features including deceit and manipulation (interpersonal; Facet 1), callousness and a lack of remorse (affective; Facet 2), impulsivity and irresponsibility (lifestyle; Facet 3), and poor behavior control and criminal versatility (antisocial; Facet 4; Hare, 2003). Initially, it would seem that laypeople would have difficulty detecting psychopaths because

of their ability to conceal deviance using deceit and superficial charm. Consistent with this theory, Furnham, Daoud, and Swami (2009) found that laypeople had a more difficult time detecting psychopathy from presented vignettes than other mental illnesses, such as depression and schizophrenia.

Conversely, growing empirical evidence suggests that psychopathy may be detected from a first impression. Fowler, Lilienfeld, and Patrick (2009) found that student raters were able to correctly and reliably perceive overall, Factor 1 (interpersonal and affective facets) and Factor 2 (lifestyle and antisocial facets) psychopathic traits in maximum-security male inmates from brief interview segments. Specifically, thin-slice psychopathy ratings correlated moderately with Psychopathy Checklist–Revised (PCL-R; Hare, 2003)

<sup>1</sup> Department of Psychology, The University of Southern Mississippi, Hattiesburg, MS, USA

<sup>2</sup> Department of Law, Criminology and Social Sciences, University of Derby, Derby, United Kingdom

<sup>3</sup> Department of Psychology, Carleton University, Ottawa, Canada

## Corresponding Author:

Christopher T. A. Gillen, Department of Psychology, The University of Southern Mississippi, Owings-McQuagge Hall 210, 118 College Drive, Hattiesburg, MS 39406, USA.

Email: [christopher.gillen@eagles.usm.edu](mailto:christopher.gillen@eagles.usm.edu)



Creative Commons CC-BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 3.0 License (<http://www.creativecommons.org/licenses/by-nc/3.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

assessments of the offenders. Ratings of nonverbal behavior (i.e., thin-slices without audio) were particularly salient in the formation of accurate judgments. Similarly, Holtzman (2011) found that undergraduates accurately detected prototypical facial presentations of psychopathy based on aggregated self-report and peer reports of the construct, especially in women targets. Nevertheless, these findings do not suggest that all people can accurately assess psychopathy, as accuracy in both studies was imperfect, possibly due to individual differences in rating ability.

### *Individual Differences and First Impressions*

Research suggests that there are a number of individual differences in first impression rating accuracy. In general, judges with developed social skills are better raters of personality in others, whereas antisociality/hostility is associated with reduced accuracy (Funder, 2012). This may be due to increased social experience and ability to interpret nonverbal behavior in others. For example, women may form more accurate impressions of normative personality on average because of a heightened sensitivity to social situations and detection of nonverbal emotion and empathy cues (Chan, Rogers, Parisotto, & Biesanz, 2011). Chan et al. argue that women may be more socially sensitive because they are more interpersonally invested than men, possibly because of specified gender roles. Five-factor personality traits characterized by social curiosity and activity (i.e., extroversion) are also related to enhanced exposure and attention to nonverbal social communication, especially eye contact and body movements (Hartung & Renner, 2011). Agreeableness, a trait associated with positive social relationships (Asendorpf & Wilpers, 1998), is also predictive of improved normative personality judgments (Funder, 2012).

Although research has found that psychopaths have difficulty decoding facial emotions such as sadness and fear (Hastings, Tangney, & Stuewig, 2008), psychopaths are also able to use certain nonverbal cues in the formation of accurate first impressions. Wheeler, Book, and Costello (2009) found that male college students scoring high on self-reported Factor 1 psychopathic traits were more accurate at perceiving vulnerability in potential victims. The authors believed this was due to manipulation and superficial charm, and the assumed related ability to decode body movement cues. In a subsequent study investigating incarcerated male raters, psychopathic personality traits, and an enhanced awareness of a victim's gait were related to improved victim selection (Book, Costello, & Camilleri, 2013). Still, there is a substantial lack of research on how individual differences affect first impression accuracy of psychopathic traits.

### *Errors and First Impressions*

Variability in first impression accuracy also underscores that people can make biased errors with their appraisals. In order to quickly detect a threat, our impressions of others rely on heuristics that often sacrifice accuracy for speed (Bar, Neta, & Linz, 2006). According to error management theory (EMT), humans

err on the side of caution, choosing to make less costly, possibly more adaptive errors in times of uncertainty (Haselton & Buss, 2000). For example, humans often identify potentially nonthreatening situations as dangerous more often than threatening situations as safe. In terms of signal detection theory, false alarms/Type I errors (identifying a nonthreatening stimulus as threatening) are less costly than missed detections/Type II errors (identifying a threatening stimulus as nonthreatening; Haselton & Buss, 2000).

In a study investigating thin-slice rating accuracy of violence-proneness, Stillman, Maner, and Baumeister (2010) found that although raters' thin-slice violence ratings of male sex offenders significantly correlated with offenders' violent criminal histories, raters still made errors in their appraisals consistent with EMT. Participants misattributed signs of offender strength as being related to increased aggression and incorrectly believed that anger states were related to trait-like aggression and violence. Those perceived as being happy or well groomed were mistakenly believed to be less violent. Similarly, a meta-analytic study by Eagly, Ashmore, Makhijani, and Longo (1991) found that raters misattributed unattractiveness in men to aggressive acts. Research investigating psychopathy has noted differential results. Fowler et al. (2009) found that raters mistakenly associated psychopathy with *increased* likability and attractiveness, rather than decreased attractiveness as predicted by EMT; however, raters overestimated the strength of the relationship between violence and Factor 2 as predicted by EMT. It is possible that superficial charm biased judgments of likability and attractiveness but not other appraisal errors.

### *The Current Study*

The aim of this study was to examine laypeople's perception accuracy of psychopathic traits in others and whether noted individual differences in personality appraisals generalize to threat detection. We also investigated how specific psychopathic traits influence perceptions of violence, likability, and attractiveness in relation to EMT in women offenders. By using a female sample, the study was able to investigate psychopathy in a traditionally understudied forensic population (McKeown, 2010) and offered an opportunity to study individual differences and EMT errors when threat is appraised in women. This is particularly salient as laypeople may view women as less violent and more trustworthy than men.

Overall accuracy of thin-slices was expected to be comparable to that of male offender targets. It was expected that women would be more accurate raters and that extroversion-sociability, agreeableness, and Facet 1 psychopathic traits would predict improved accuracy of thin-slices of psychopathy. This is based on the findings that these factors are associated with more accurate normative personality judgments because of enhanced social skills and heightened sensitivity toward nonverbal behavior and communication. Since no published study has examined individual differences in psychopathy detection, the other Big 5 traits (i.e., openness,

contentiousness, and neuroticism) were examined to determine their predictive power in thin-slice accuracy. Due to superficial charm of the offender, it was predicted that raters would associate Facet 1 traits in women with increased attractiveness and likability comparable to the findings with male offender targets (Fowler, Lilienfeld, & Patrick, 2009), whereas raters would overestimate the strength of the relationship between violence and psychopathy consistent with EMT.

## Method

### Participants

The participants were 24 male and 43 female undergraduate students enrolled in first or second year psychology classes (age range of 18–43 years;  $M = 20.60$ ). Over 80% of participants were Caucasian. Students received course credit for participation.

The offenders rated by the participants were women from a pretrial remand facility, who were waiting for court dates or serving a sentence of less than 2 years (age range of 18–41 years;  $M = 30.00$ ,  $SD = 6.64$ ). Offenders were previously assessed on the PCL-R for research purposes by a trained rater and gave consent to have their recorded interviews used in future research. The majority of the sample was Caucasian (84%). The index offenses were 55% nonviolent (i.e., drug offenses, theft, escape) and 45% violent (i.e., assault, murder, sex offense).

### Measures

#### Offender/target measures

**PCL-R (Hare, 2003).** The PCL-R is a 20-item clinical rating of psychopathy based on file information and interviews conducted by a trained rater. While there has been conflicting research on the PCL-R factor structure (e.g., Cooke, Michie, & Skeem, 2007), there seems to be support for a two-factor model composed of four facets (Neumann, Johansson, & Hare, 2013; see introduction for facet descriptions). The PCL-R has been found to be a reliable and valid measure of psychopathy in female offenders (McKeown, 2010). In the current study, PCL-R scores displayed satisfactory internal consistency for total ( $\alpha = .86$ ), Factor 1 ( $\alpha = .89$ ) and Factor 2 scores ( $\alpha = .76$ ; Field, 2013).

**The Self-Report Violence Questionnaire (SRVQ; Mailloux & Forth, 1999).** The SRVQ is a 12-item self-report measure designed to determine how often offenders engage in violent antisocial behavior. Responses to each item are made using two scales that measure the total frequency of a behavior and its occurrence the year prior to incarceration. The internal reliability of both scales was acceptable in the present study ( $\alpha = .86$ –.90).

**Thin-slice ratings (Fowler, 2008).** Likert thin-slice ratings are based on sentence descriptions of violence-proneness, attractiveness, likability, and psychopathy. Psychopathy is judged using five observer-rated descriptions modified from Fowler (2008). One description asks raters to assess psychopathy

globally as a complete construct (i.e., is this person a psychopath), whereas the other items describe specific characteristics and traits of each of the four facets consistent with the PCL-R. That is, specific descriptors were given to help guide rater judgments only when appraising each facet. Interpersonal and affective psychopathic ratings were combined to create Factor 1 thin-slice ratings, whereas lifestyle and antisocial ratings were similarly added to create Factor 2 ratings. This was done so that the two-factor psychopathy model could be investigated in addition to the four-facet model. Intraclass correlations (ICCs) based on absolute agreement averaged across all 67 raters were high and acceptable ( $ICC = .74$ –.91) for all ratings except likability ( $ICC = .65$ ).

#### Rater/perceiver measures

**NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992).** The NEO-FFI is a 60-item self-report measure of the Big 5 personality traits: neuroticism, extroversion, agreeableness, conscientiousness, and openness. The NEO-FFI has shown high internal consistency and validity in undergraduate samples (Holden, Wasylkiw, Starzyk, Book, & Edwards, 2006). In the present study, internal consistency was good for all traits ( $\alpha = .74$ –.87), except openness ( $\alpha = .66$ ).

**Self-Report Psychopathy Scale: Short Form (SRP: SF; Paulhus, Neumann, & Hare, 2016).** The SRP: SF is a 29-item self-report measure of interpersonal, affective, lifestyle, and antisocial psychopathic traits. The long-form SRP-III has shown good internal consistency and validity when used with university students (Neal & Sellbom, 2012). In the current study, SRP: SF total scores displayed strong internal reliability ( $\alpha = .89$ ), with facet scores displaying good consistency ( $\alpha = .70$ –.80) except the lifestyle facet ( $\alpha = .61$ ).

### Materials

Thin-slices of behavior were created by using 10-s segments of prerecorded PCL-R interviews. Each thin-slice was taken from the opening 10 min of the interview as in Fowler and colleagues (2009), ensuring the content of each thin-slice was related to the offenders' family history. This was done to standardize thin-slices and ensure that information related to criminal and antisocial behavior discussed later in the interview would not bias raters' impressions. This helped create a more realistic first impression as raters were not directly primed to target behaviors outlined in the thin-slice rating descriptors. Researchers and raters were blind to PCL-R scores. One thin-slice was removed, because the offender's data file was incomplete. As a result, thin-slice ratings could not be compared to criterion measures for this case; however, this case remained in analyses not involving comparisons to offender criterion measures.

### Procedure

Participants first completed the SRP: SF, a demographic questionnaire, and the NEO-FFI. Participants then watched the first 10-s thin-slice, after which they completed the participant

observer ratings as applied to the interviewee. Three separate orders of thin-slice presentations were created as a method of randomizing presentation order. The process was repeated until all 22 cases had been viewed.

## Results

### Descriptive Statistics

Descriptive statistics for rater Big Five personality and psychopathy scores are displayed in Table A1, while thin-slice ratings and offender criterion measures are found in Table A2. While offender PCL-R scores were normally distributed, past year SRVQ scores were positively skewed. All thin-slice ratings were distributed normally; however, participant total, affective, and antisocial SRP: SF scores were positively skewed, and conscientiousness was negatively skewed<sup>1</sup>; all other rater personality traits were normally distributed.

### Overall Rating Accuracy

Participants' individual thin-slice psychopathy ratings were averaged across 21 offender target cases to obtain a mean thin-slice rating for each offender. Mean thin-slice ratings were then correlated with the offenders' PCL-R criterion ratings to assess baseline accuracy of psychopathy detection as was done in Fowler et al. (2009). No correlations were significant,  $r_s = -.06$  to  $.24$ .

### Individual Differences in Rating Accuracy

Each participant's global, Factor 1, and Factor 2 thin-slice ratings were correlated with their corresponding PCL-R criterion measures to obtain a correlational coefficient representing the thin-slice rating accuracy of each participant across cases. As in Carney, Colvin, and Hall (2007), accuracy coefficients were converted into Fisher's  $z$ -transformed accuracy scores to normalize the distribution.

Three separate linear regressions were used to test whether individual rater differences predicted thin-slice global, Factor 1, and Factor 2  $z$ -transformed accuracy coefficients. Rater neuroticism, extroversion-sociability, openness, agreeableness, conscientiousness, gender, and self-reported psychopathic traits (Facets 1–4) were used as predictors in each model. Although the regression predicting global psychopathy rating accuracy was not significant, Factor 1,  $R^2 = .32$ ,  $F(10, 54) = 2.55$ ,  $p = .015$ , and Factor 2 accuracy,  $R^2 = .39$ ,  $F(10, 56) = 3.62$ ,  $p = .001$ , were significantly predicted after Bonferroni correction ( $\alpha_{fw} = .05$ ). Factor 2 accuracy was related to rater sociability, neuroticism, and SRP: SF lifestyle/Facet 3 scores, whereas Factor 1 was predicted by agreeableness and antisocial/Facet 4 scores (see Table A3).

### Rating Errors and Biases

In order to investigate the errors raters made when assessing psychopathy, thin-slice violence, likability, and attractiveness

ratings were averaged across the 22 offender targets and were correlated with thin-slice measures of psychopathy (see Table A4). Mean thin-slice violence ratings were strongly correlated with all psychopathy thin-slice ratings, whereas likability ratings were only significantly related to interpersonal/Facet 1 ratings. Correlations between target PCL-R and SRVQ scores and mean thin-slice likability and attractiveness ratings (averaged across raters) were also calculated (see Table A4). Only the correlation between PCL-R antisocial and past year SRVQ violence scores was significant.

Fisher's  $r$ -to- $z$  transformations were used to examine whether the differences between thin-slice and criterion correlations were significant. Correlations between thin-slice violence and psychopathy ratings were more strongly related than all corresponding criterion psychopathy–violence correlations,  $z_s$  between 2.01 and 4.37,  $p \leq .044$ . No other thin-slice criterion correlations were significantly different.

## Discussion

This study presents several novel findings related to the differences in accuracy and bias of first impressions of psychopathy. As expected, personality differences related to social experience and nonverbal cue detection predicted enhanced judgments of psychopathic traits from thin-slices. Characteristics associated with improved social relationships and normative personality rating accuracy, namely, agreeableness and low behavioral–antisocial psychopathic traits (Funder, 2012), were found to be related to better ratings of Factor 1 traits in women offenders. Extroversion-sociability, typified by more frequent and diverse social interactions and nonverbal behavior detection (Hartung & Renner, 2011), was related to improved Factor 2 accuracy; neuroticism was also predictive of reduced accuracy. Although research has not found a relationship between neuroticism and normative first impression differences, our finding is consistent with literature examining neuroticism and social functioning. Similar to agreeable raters, judges with reduced neuroticism may be better judges of psychopathic traits because of improved social competency (i.e., interpersonal problem-solving skills, positive interactions with others; McNulty, 2008).

Such individuals may have more rich social experiences from which to form more accurate impressions. Presumably, such raters are better judges because of an enhanced ability to decode the nonverbal gestures uniquely related to psychopathy (i.e., increased eye contact, use of hand gestures, leaning forward; Rimé, Bouvy, Leborgne, & Rouillon, 1978). This may be especially true of extroverted judges, given their acuity in perceiving eye contact and body movement cues. However, since this study did not examine social experience or nonverbal thin-slices separate from audio information, the hypothetical mechanism underlying these differences could not be directly investigated. Nevertheless, these results provide evidence against one competing individual difference theory that certain judges are more accurate because they make more positive evaluations, which are usually correct of most targets (Chan

et al., 2011). It is unlikely that this explanation accounts for psychopathy judgment differences. If raters' judgments are influenced by nonverbal cues, future research could use eye-tracking technology during thin-slice presentations to see where participants look when forming first impressions.

Nevertheless, some caution should be applied to these conclusions. Not all factors related to social experience and personality appraisals predicted psychopathy rating accuracy, indicating that some normative personality judgment differences may not apply to threat detection. This is especially true of gender and Factor 1 psychopathic traits. Consistent with the current study, Stillman et al. (2010) found that women were not better raters of violence than men even though Chan, Rogers, Parisotto, and Biesanz (2011) noted gender differences in appraising normalized personality. Similarly, nonverbal cues used by psychopaths in victim selection (Book et al., 2013) may not affect threat detection. Further, there were no differences in global psychopathy rating accuracy as expected. While raters were cued by specific descriptions when rating each of the individual psychopathy facets, participants were only asked to rate "how psychopathic" the target was for the global rating (i.e., no specific criteria were given). This suggests that individual differences in psychopathy detection may only apply when raters are primed toward specific behaviors, which may apply less to real-life first impression formation.

Although individual differences were noted, analyses examining overall accuracy indicated that laypeople were unable to detect psychopathy in women offenders as in male offenders (Fowler et al., 2009). While this finding is contrary to expectations, reduced accuracy is consistent with theory, suggesting that psychopaths readily deceive and manipulate individuals of their true intentions (Hare, 2003). On average, raters may not have been able to see through this superficial facade. Methodological limitations may also have influenced the results. It is possible that low power (i.e., small thin-slice sample) contributed to the lack of significance. Perhaps more importantly, PCL-R scores from a single rater were used to determine the accuracy of thin-slice ratings of the construct. It is possible that PCL-R appraisals were subject to the individual accuracy differences the current study examined. As such, using PCL-R scores might not be a completely objective measure of the target's psychopathic traits from which to establish participant accuracy or bias.

While participants could not accurately detect psychopathy as hypothesized, raters made EMT-type judgment errors consistent with evolutionary psychology theory. This was especially true of perceptions between violence and psychopathy, as raters perceived the associations between the two constructs to be stronger than the relations between concurrent criterion measures. Comparable to Fowler and colleagues (2009), likability ratings were uniquely positively related to perceptions of offender interpersonal psychopathic traits, suggesting that

superficial charm unique to Facet 1 influenced opinions counter to EMT. However, this may not be a biased perception as the correlation between PCL-R Facet 1 scores and perceptions of likability was similar in magnitude. From an evolutionary perspective, it seems that heuristics used to overevaluate threat in order to keep safe apply to judgments of psychopathy and assessments of female targets; however, females expressing interpersonal traits may be able to deceive others by appearing more likable.

Nevertheless, this conclusion needs to be viewed in context of limitations. Because prior psychopathy knowledge was not measured, it is possible that errors reflect misconceptions about psychopathy rather than evolutionary-driven perceptual biases. Future research would be wise to investigate the effect that teaching raters about psychopathy has on EMT errors. It is also possible that using an offender sample biased judgments such that perceptions of psychopathy, violence, and likability were inflated and inaccurate. While this is possible, this did not detract from EMT in the sense that potential threats were still viewed as more threatening than they were, regardless of the mechanism used to make those errors.

Overall, these findings indicate that the ability to reflexively identify psychopathy and its associated threat differs among individuals and that people seem to make evolutionary adaptive errors when rating psychopathy. It is possible that people with specific personality traits have developed an evolutionary defense mechanism, which allows them to better detect threat before harm can be done. However, it appears that psychopaths are able to deceive most people, highlighting their dangerousness in society and the need for validated measures to assess the construct accurately.

## Appendix

**Table A1.** Descriptive Statistics for Participants' SRP: SF and NEO-FFI Scores.

Measure	M	SD	Range	Skew (SE)	Kurtosis (SE)
SRP: SF total	53.03	15.24	30–90	0.63 (0.29)	−0.47 (0.58)
Interpersonal	13.73	5.09	7–27	0.51 (0.29)	−0.48 (0.58)
Affective	13.46	4.71	7–24	0.63 (0.29)	−0.63 (0.58)
Lifestyle	15.37	4.20	7–25	0.06 (0.29)	−0.81 (0.58)
Antisocial	11.01	3.78	8–25	1.62 (0.29)	2.50 (0.58)
NEO-FFI					
Neuroticism	32.06	8.17	12–48	0.11 (0.29)	−0.54 (0.58)
Extroversion sociability	12.91	3.06	6–20	−0.23 (0.29)	−0.35 (0.58)
Openness	41.00	5.61	26–54	−0.16 (0.29)	0.42 (0.58)
Agreeableness	44.39	5.50	33–56	−0.17 (0.29)	−0.73 (0.58)
Conscientiousness	44.70	6.57	21–58	−0.99 (0.29)	2.24 (0.58)

Note. *n* = 67. SRP: SF = Self-Report of Psychopathy: Short-Form; NEO-FFI = NEO Five-Factor Inventory.

**Table A2.** Descriptive Statistics for Thin-Slice Ratings and Offenders' Criterion Measures.

Measure	M	SD	Range	Skew (SE)	Kurtosis (SE)
Thin-slice ratings					
Global psychopathy	3.24	0.52	2.36–4.30	−0.06 (0.49)	−0.55 (0.95)
Factor 1	6.42	0.92	4.52–8.09	−0.14 (0.49)	−0.38 (0.95)
Interpersonal	3.11	0.50	2.28–4.36	0.29 (0.49)	0.39 (0.95)
Affective	3.30	0.50	2.16–4.30	−0.29 (0.49)	0.07 (0.95)
Factor 2	7.01	7.01	5.28–9.72	0.62 (0.49)	1.11 (0.95)
Lifestyle	3.33	0.51	2.42–4.73	0.51 (0.49)	1.61 (0.95)
Antisocial	3.68	0.58	2.73–4.99	0.63 (0.49)	−0.03 (0.95)
Violence	3.71	0.50	2.64–4.73	−0.11 (0.49)	−0.04 (0.95)
Attractiveness	2.28	0.54	1.37–3.30	0.22 (0.49)	−0.63 (0.95)
Likability	2.08	0.25	1.55–2.58	−0.42 (0.49)	0.35 (0.95)
Criterion measures					
PCL-R total	17.88	8.67	4–34	0.24 (0.50)	−0.94 (0.97)
Factor 1	6.33	5.03	0–15	0.30 (0.50)	−1.51 (0.97)
Interpersonal	2.62	2.65	0–8	0.51 (0.50)	−1.21 (0.97)
Affective	3.71	2.51	0–8	0.21 (0.50)	−1.39 (0.97)
Factor 2	10.00	4.40	2–18	0.09 (0.50)	−0.59 (0.97)
Lifestyle	5.52	2.18	1–9	−0.24 (0.50)	−0.46 (0.97)
Antisocial	4.48	2.79	1–10	0.63 (0.50)	−0.69 (0.97)
Violence: past year	7.33	7.85	0–27	0.92 (0.50)	−0.03 (0.97)
Violence: lifetime	11.67	10.59	0–37	1.32 (0.50)	1.32 (0.97)

Note. Thin-slice ratings were averaged across all raters for each target ( $n = 22$ ); criterion measures ( $n = 21$ ). PCL-R = Psychopathy Checklist–Revised.

**Table A3.** Regression Statistics Predicting Factors 1 and 2 Thin-Slice Rating Accuracy.

Predictor	Factor 1 Accuracy		Factor 2 Accuracy	
	$\beta$ (SE)	$sr^2$	$\beta$ (SE)	$sr^2$
Gender	.14 (.06)	.012	.06 (.06)	.002
Neuroticism	−.20 (.00)	.032	−.32* (.00)	.085
Extroversion sociability	.09 (.01)	.006	.36* (.01)	.104
Openness	.01 (.01)	.000	−.08 (.00)	.005
Agreeableness	.42* (.01)	.109	.07 (.01)	.003
Conscientiousness	.00 (.00)	.000	−.09 (.00)	.006
Interpersonal/Facet 1	−.02 (.01)	.000	.14 (.01)	.006
Affective/Facet 2	.40 (.01)	.044	.23 (.01)	.016
Lifestyle/Facet 3	−.10 (.01)	.005	−.45* (.01)	.099
Antisocial/Facet 4	−.42* (.01)	.106	.04 (.01)	.001

Note. Factor 2 accuracy is shown outside parentheses ( $n = 67$ ); Factor 1 accuracy is in parentheses ( $n = 65$ ).

\* $p < .01$ .

**Table A4.** Zero-Order Correlations Between Thin-Slice Attractiveness and Likability Ratings and (a) Thin-Slice Psychopathy and Violence Ratings and (b) Criterion PCL-R and SRVQ Scores.

Psychopathy	(a) Thin-Slice Ratings ( $n = 67$ )			(b) Criterion Ratings ( $n = 21$ )		
	Violence	Likability	Attractiveness	SRVQ	Likability	Attractiveness
Global	.85**	.15	−.13	.43 (.13)	.09	−.19
Interpersonal	.76**	.27*	.03	.21 (.00)	.32	−.12
Affective	.83**	.18	.05	.34 (.00)	.25	−.09
Lifestyle	.82**	.17	.02	.31 (−.01)	−.21	−.12
Antisocial	.81**	.18	.02	.53* (.41)	−.05	−.18

Note. Ratings were averaged across targets/offenders for thin-slice results ( $n = 67$ ); ratings were averaged across raters/perceivers for criterion results ( $n = 21$ ); for the SRVQ, past year and total violence correlations are presented outside and inside parentheses, respectively. PCL-R = Psychopathy Checklist–Revised; SRVQ = The Self-Report Violence Questionnaire.

\* $p < .05$ . \*\* $p < .01$ .

## Acknowledgments

We would like to thank John Logan for his assistance in randomizing thin-slices and Monika Taing for her help collecting the data. Thankyou to Julie Blais and Heather Clark for their help in preparing the article.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

## Note

1. Nonnormal factors were transformed to achieve normality. Because transformation did not affect the significance of subsequent results, nontransformed factors were retained for each model.

## References

- Asendorpf, J. B., & Wilpers, S. (1998). Personality effects on social relationships. *Journal of Personality and Social Psychology*, 74, 1531–1544.
- Bar, M., Neta, M., & Linz, H. (2006). Very first impressions. *Emotion*, 6, 269–278.
- Book, A., Costello, K., & Camilleri, J. A. (2013). Psychopathy and victim selection: The use of gait as a cue to vulnerability. *Journal of Interpersonal Violence*, 28, 2368–2383.
- Carney, D. R., Colvin, C. R., & Hall, J. A. (2007). A thin-slice perspective on the accuracy of first impressions. *Journal of Research in Personality*, 41, 1054–1072.
- Chan, M., Rogers, K. H., Parisotto, K. L., & Biesanz, J. C. (2011). Forming first impressions: The role of gender and normative accuracy in personality perception. *Journal of Research in Personality*, 45, 117–120.
- Cooke, D. J., Michie, C., & Skeem, J. (2007). Understanding the structure of the psychopathy checklist-revised: An exploration of methodological confusion. *British Journal of Psychiatry*, 190, 39–50.
- Costa, P. T., & McCrae, R. R. (1992). *NEO PI-R professional manual*. Odessa, FL: Psychological Assessment Resources.
- Costanzo, M., & Archer, D. (1989). Interpreting the expressive behavior of others: The interpersonal perception task. *Journal of Nonverbal Behavior*, 13, 225–245.
- Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but . . . : A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin*, 110, 109–128.
- Field, A. (2013). *Discovering statistics using SPSS* (4th ed.). London, England: Sage.
- Fowler, K. A. (2008). *Detecting psychopathic traits from thin-slices of behavior*. Doctoral dissertation. Available from ProQuest Dissertations and Theses database (UMI No. 3279872).
- Fowler, K. A., Lilienfeld, S. O., & Patrick, C. J. (2009). Detecting psychopathy from thin-slices of behavior. *Psychological Assessment*, 21, 68–78.
- Funder, D. C. (2012). Accurate personality judgment. *Current Directions in Psychological Science*, 21, 177–182.
- Furnham, A., Daoud, Y., & Swami, V. (2009). “How to spot a psychopath”: Lay theories of psychopathy. *Social Psychiatry and Psychiatric Epidemiology*, 44, 464–472.
- Hare, R. D. (2003). *Manual for the hare psychopathy checklist revised* (2nd ed.). Toronto, Canada: Multi-Health Systems.
- Hartung, F., & Renner, B. (2011). Social curiosity and interpersonal perception: A judge  $\times$  trait interaction. *Personality and Social Psychology Bulletin*, 37, 796–814.
- Haselton, M. G., & Buss, D. M. (2000). Error management theory: A new perspective on biases in cross-sex mind reading. *Journal of Personality and Social Psychology*, 78, 81–91.
- Hastings, M. E., Tangney, J. P., & Stuewig, J. (2008). Psychopathy and identification of facial expressions of emotion. *Personality and Individual Differences*, 44, 1474–1483.
- Holden, R. R., Wasylkiw, L., Starzyk, K. B., Book, A. S., & Edwards, M. J. (2006). Inferential structure of the NEO Five-Factor Inventory: Construct validity of the big four personality clusters. *Canadian Journal of Behavioural Science*, 38, 24–40.
- Holtzman, N. S. (2011). Facing a psychopath: Detecting the dark triad from emotionally-neutral faces, using prototypes from the personality faceaurus. *Journal of Research in Personality*, 45, 648–654.
- Mailloux, D., & Forth, A. (1999). *Self-reported violence scale*. Unpublished test. Ottawa, ON: Carleton University.
- McKeown, A. (2010). Female offenders: Assessment of risk in forensic settings. *Aggression and Violent Behavior*, 15, 422–429.
- McNulty, J. K. (2008). Neuroticism and interpersonal negativity: The independent contributions of perceptions and behaviors. *Personality and Social Psychology Bulletin*, 34, 1439–1450.
- Neal, T. M. S., & Sellbom, M. (2012). Examining the factor structure of the Hare Self-Report Psychopathy Scale. *Journal of Personality Assessment*, 94, 244–253.
- Neumann, C. S., Johansson, P. T., & Hare, R. D. (2013). The psychopathy checklist-revised (PCL-R), low anxiety, and fearlessness: A structural equation modeling analysis. *Personality Disorders: Theory, Research, and Treatment*, 4, 129–137.
- Paulhus, D. L., Neumann, C. S., & Hare, R. D. (2016). *Manual for the Self-Report Psychopathy (SRP) scale*. Toronto, Canada: Multi-Health Systems.
- Rimé, B., Bouvy, H., Leborgne, B., & Rouillon, F. (1978). Psychopathy and nonverbal behavior in an interpersonal situation. *Journal of Abnormal Psychology*, 87, 636–643.
- Stillman, T. F., Maner, J. K., & Baumeister, R. F. (2010). A thin-slice of violence: Distinguishing violent from nonviolent sex offenders at a glance. *Evolution and Human Behavior*, 31, 298–303.
- Wheeler, S., Book, A., & Costello, K. (2009). Psychopathic traits and perceptions of victim vulnerability. *Criminal Justice and Behavior*, 36, 635–648.